

PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number Q61924
Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	Application Number 09/722,299	Filed November 28, 2000
	First Named Inventor Francois PANZANI	
	Art Unit 2617	Examiner Huy D. NGUYEN
<p style="text-align: center;">WASHINGTON OFFICE 23373 CUSTOMER NUMBER</p>		
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal</p> <p>The review is requested for the reasons(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p><input checked="" type="checkbox"/> I am an attorney or agent of record.</p> <p>Registration number <u>28,703</u></p> <p style="text-align: right;"><u>/DJCushing/</u> Signature</p> <p style="text-align: right;"><u>David J. Cushing</u> Typed or printed name</p> <p style="text-align: right;"><u>(202) 293-7060</u> Telephone number</p> <p style="text-align: right;"><u>August 10, 2009</u> Date</p>		

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q61924

Francois PANZANI, et al.

Appln. No.: 09/722,299

Group Art Unit: 2617

Confirmation No.: 5765

Examiner: Huy D. NGUYEN

Filed: November 28, 2000

For: SATELLITE TELECOMMUNICATION SYSTEM

PRE-APPEAL BRIEF REQUEST FOR REVIEW

MAIL STOP AF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Pursuant to the Pre-Appeal Brief Conference Pilot Program, and further to the Examiner's Final Office Action dated February 9, 2009, Applicant files this Pre-Appeal Brief Request for Review. This Request is also accompanied by the filing of a Notice of Appeal.

Claims 1-13 are all the claims pending in the application. The claims as they presently stand are set forth at pages 2-4 of the Amendment filed December 1, 2008. In the final Office action mailed February 9, 2009, claims 1, 2, and 4-13 are rejected as unpatentable over Patterson (USP 5,736,959) in view of Schwendeman (USP 5,257,019), and claim 3 is rejected over the same art in further view of Chao (USP 6,215,776).

Citations to the Record -

The invention, the claims, the prior art and the flaws in the rejections are summarized below, but a more detailed presentation of each can be found in the following:

1. The invention is described in Section V: Summary of the Claimed Subject Matter, found at pages 6-8 of the Appeal Brief filed April 7, 2008.

2. The reasons that the rejections are not sustainable are described in detail at pages 2-3 of the Request For Reconsideration filed June 9, 2009, and pages 2-4 of the Second Request For Reconsideration filed July 23, 2009.

Restatement of Appellant Position –

The present invention is directed to a technique for simplifying the connections needed to handle multiple antennas each covering a respective area. The simplification is realized by grouping antennas/areas together and, from a resource allocation standpoint, treating each group of areas the same way a conventional system would treat an individual area. (See, e.g., lines 14-15 of page 4 of the specification.)

The context of the invention is a system wherein a region covered by a satellite includes a plurality of areas, with each area covered by a respective antenna on board the satellite. The system receives calls from any area and can transmit the calls either back to the same area or another area. According to the invention, signals from plural areas are combined into groups, and the “groups” are routed, rather than separately routing individual calls within a group. This is described at lines 14-20 of page 8 of the specification with reference to Fig. 4. As shown in Fig. 4, the antennas 16₁ and 16₂ are both connected together for purposes of routing, with the antenna pair connected to a single switch matrix input and a single switch matrix output.

Claim 1 describes the onboard transmit/receive system as including a means for combining signals from the plurality of areas into groups, and routing means for routing calls from any one of the groups to itself, or to another of the groups.

In Patterson, Figs. 3a and 3b show the satellite footprint 16 covering a diameter of about 700 km, and this footprint can be divided up into plural supercells 22 each made up of cells 26. Each cell is illuminated by a beam from the satellite, and the specification describes all beams from any one satellite as being generated by a multibeam antenna. There is no discussion whatsoever of any “grouping” in Patterson. The examiner has not explained what the basis is in Patterson for the examiner’s allegation that Patterson teaches “combining” signals from different areas, but the only apparent basis for this allegation is that calls within the same cell are handled

by the same beam, and there must inherently be some combination of signals since they are in the same beam.

So what the examiner has proposed is to consider a single cell in Patterson, covered by a respective beam, to be made up of a plurality of areas. And whatever “combining” occurs in Patterson is the combining that is inherent in the areas all being covered by the same beam.

A problem with this proposal of the examiner is that in Patterson, each “area” is not covered by a respective antenna as is required by claim 1. The examiner relies on Schwendeman to teach the use of separate antennas for different areas. Schwendeman suggests that in a system where different areas are covered by different lobes of a beam pattern, the system can instead use different antennas to illuminate the different areas. So one might modify Patterson to use separate antennas for each supercell, or maybe even for each cell. But this still misses the point of the invention. The critical distinction over Patterson is not dependent on whether Patterson uses beams from a single antenna or from separate antennas. Patterson does not teach combining, for purposes of routing, calls from different beams. If the different beams are from separate antennas, there would still be no combining of calls from different antennas. Again, the only “combining” that takes place in Patterson is the combining that might be inherent in the fact that calls are part of the same beam. But as soon as the calls are not part of the same beam but are now handled by different antennas, neither Patterson nor Schwendeman give any reason why one of skill in the art would want to combine the calls into a group and then rout calls as a group.

In the second Advisory Action, mailed August 10, 2009, the examiner argues for a broader interpretation of Schwendeman. The examiner argues that Schwendeman teaches that different geographic areas can be illuminated by different antennas, and that this should not be limited to large areas such as the entire Baltimore-Washington region. The examiner apparently proposes to take this statement in Schwendeman, appearing at lines 40-43 of column 2, entirely out of the context of Schwendeman, ignoring that the statement occurs in a paragraph beginning at line 20 of column 2 where the patentee describes that each lobe of a multi-lobe antenna radiates a geographic area of the earth, that each lobe may radiate a large portion of the earth, and gives as an example the entire Baltimore-Washington region as being illuminated by a single

lobe. Applicant here does not maintain that the teaching of Schwendeman is limited only to regions as large as the Baltimore-Washington region, but that is the only specific example given. What is clear is that it is teaching a substitute of individual antennas for lobes, and if that teaching is applied to Patterson it would result in an individual antenna for each supercell, or at most for each cell. To take the comment of Schwendeman and argue that it would have taught the artisan to provide a separate antenna for each one meter diameter around each cell phone (as the examiner first proposed) or to each 100 meter diameter around each cell phone (as the examiner apparently now proposes) is simply illogical.

But the whole issue of whether or not the “geographical areas” of Schwendeman are large or small is really a non-issue. If for some reason (not apparent to applicant) one of skill in the art would modify Patterson such that separate antennas would be used to radiate small areas within each cell, there is nothing in either Patterson or Schwendeman that would have taught the artisan to combine signals from multiple different antennas and to then route the combined signals either to another group or back to the same group. If one went to the trouble of providing separate antennas for two different areas, the only reason for providing the separate antennas would be to allow the signals from the two areas to be treated separately. The only “combining” in Patterson is due to the fact that they are all included in a single beam. Once separate antennas are provided, there is no “combining” as required in claim 1, and no reason to provide the “combining” other than hindsight after reviewing the present application.

For the reasons given above, it is respectfully submitted that the examiner has not presented a prima facie case of obviousness, and the rejections should be reversed.

Respectfully submitted,

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